

Nicholas Young

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SKILLS

Programming

- Proficient in: C, C++, Python, SystemVerilog
- Experience with: Verilog, ARM, MATLAB, HTML/CSS/Javascript

Debugging

- Capable of efficiently diagnosing failures through error signatures, log file outputs, and waveforms

Software Development Computer Skills

- Adept at using the Linux operating system and command line interfaces in code development workflows
- Experienced with using Git to keep track of code revisions in both individual and collaborative repositories

WORK EXPERIENCE

Intel Pre-Silicon Hardware Validation Engineer June 2021 - Present
Intern May 2019 – August 2019, May 2020 – August 2020

- Member of a team responsible for validating the design of Intel's next generation computer chips
- Utilized Scrum development methodology to collaborate with coworkers and complete projects efficiently
- Programmed validation test scenarios that simulate the processor to help identify potential design flaws
- Composed python scripts to help simplify and accelerate my team's normal workflow and increase productivity
- Uncovered a large bug missed by previous teams, allowing it to be fixed just as the chip was being made in silicon
- One of only a few engineers granted full administrator privileges to control updates to the validation codebase
- Selected to work with an international team on a six month assignment to enhance cross team collaboration

EDUCATION

University of Michigan Ann Arbor, MI April 2020, April 2021

- Master of Science in Engineering in Electrical and Computer Engineering, Embedded Systems GPA: 3.75 / 4
- Bachelor of Science in Engineering in Computer Engineering, Summa Cum Laude GPA: 3.78 / 4
- International Engineering Minor
- Advanced Embedded Systems, Engineering Interactive Systems, Data Structures and Algorithms, Introduction to AR/VR Application Design, Computational Data Science and Machine Learning, Introduction to Operating Systems

PREVIOUS PROJECT EXPERIENCE

Gesture Controlled Mobile Nerf Turret University of Michigan

- Used accelerometers, IMUs, and flex sensors to manually aim and shoot, and a color sensor for automatic aiming
- Employed radio communication, DC motors, and servos to wirelessly drive and aim the turret
- Designed and coded gesture control in C and a basic target tracking algorithm in ARM

BrainStorm On-Ear Bluetooth Electroencephalogram University of Michigan

- Collaborated with peers to plan and implement a wearable electroencephalogram to measure brain wave activity
- Utilized a microcontroller running FreeRTOS, electrodes into an ADC, a bluetooth module, and a LiPo battery
- Demonstrated the ability for the device to successfully collect and transmit data to a host computer for processing

NicholasYoung.info

- Independently produced a personal website to host information about myself using HTML, CSS, and Javascript
- Hosted this website using a Raspberry Pi 3B+ running nginx and connecting to the web through a Cloudflare Tunnel

ADDITIONAL QUALITIES

- **Quick Learner** - Able to adapt to new situations and learn new skills quickly in order to fulfill various roles
- **Eagle Scout** - Achieved the rank of Eagle Scout, the highest rank in Scouting
- **Japanese Language** - Capable of speaking and writing basic Japanese
- **Hobbies** - Enjoy bouldering, snowboarding, drawing, video games, virtual reality, and more!